

CLAIMS

What is claimed is:

- 5           1.     A wireless consumer transaction system, comprising:
- a wireless interface for communicating with wireless cellular devices,  
for conveying a menu of user options to the wireless cellular devices, and  
for receiving user selections from the wireless cellular devices;
- a computer comprising local storage for retaining user selections  
10   received via the wireless interface, said computer configured to determine a  
point-of-sale transaction price based upon said user selections;
- a remote interface for communicating with a remote processing  
center, whereby said computer sends a request for point-of-sale transaction  
approval to said remote processing center and receives a point-of-sale  
15   transaction approval response from said remote processing center in  
response to a request by a user to carry out a point-of-sale transaction; and
- a point-of-sale terminal coupled to said computer, wherein said  
computer conveys a point-of-sale transaction approval indication to said  
point-of-sale terminal in response to said point-of-sale transaction approval  
20   response.

          2.     The wireless consumer transaction system of claim 1, wherein  
said wireless cellular devices include cellular telephones.

3. The wireless consumer transaction system of claim 1, wherein:  
the wireless consumer transaction system is located within a  
coverage area of a base station of a cellular network;  
said wireless interface comprises a short-range wireless transceiver,  
5 and  
wherein said wireless interface is configured to detect and respond to  
the presence of wireless cellular devices in proximity to the wireless  
transceiver.

10 4. The wireless consumer transaction system of claim 3, wherein,  
upon detecting a wireless cellular device, the wireless interface transmits a  
short message to the wireless cellular device via said base station of the  
cellular network, said short message being in a standard short message  
format supported by said cellular network.

15 5. The wireless consumer transaction system of claim 3, wherein,  
upon detecting a wireless cellular device, the wireless interface  
communicates with said wireless cellular device over a frequency or  
channel not utilized by said base station.

20 6. The wireless consumer transaction system of claim 1, wherein  
said computer is configured to convey a list of user selections for display on

a point-of-sale terminal, other than a sales terminal, used for fulfillment of the user's request.

7. The wireless consumer transaction system of claim 1, wherein  
5 said computer is configured to authenticate a user at least in part by using a mobile equipment identifier associated with the wireless cellular device.

8. The wireless consumer transaction system of claim 1, wherein  
said computer is configured to authenticate a user at least in part by using  
10 a password entered by the user using the wireless cellular device.

9. The wireless consumer transaction system of claim 1, wherein  
said remote processing center includes a user account from which a user  
may automatically draw funds for purchasing goods or services offered  
15 through the wireless consumer transaction system.

10. The wireless consumer transaction system of claim 9, wherein  
the user may add additional funds to the user account maintained at the  
remote processing center through a user-initiated electronic transfer.

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11. A method for carrying out consumer transactions, comprising the steps of:

detecting, at a wireless station, the presence of a wireless cellular device within proximity of the wireless station, said wireless station located  
5 within a coverage area of a cellular network and configured to provide point-of-sale information to wireless cellular devices;

establishing communication with a wireless cellular device by way of the wireless station;

receiving, via the wireless station, an indication from the wireless  
10 cellular device to proceed with a point-of-sale transaction;

conveying a menu of user options to the wireless cellular device via the wireless station;

receiving and storing user selections from the wireless cellular devices via the wireless station;

15 determining a point-of-sale transaction price based upon said user selections;

sending a request for point-of-sale transaction approval to a remote processing center, said point-of-sale transaction approval including said transaction price;

20 receiving a point-of-sale transaction approval response from said remote processing center; and

displaying an indication of the point-of-sale transaction approval response on a point-of-sale terminal.

12. The method of claim 11, wherein said wireless cellular device comprises a cellular telephone.

13. The method of claim 11, wherein said wireless interface  
5 comprises a short-range wireless transceiver covering a microcellular region overlapping with the coverage area of the cellular network.

14. The method of claim 11, further comprising the step of, upon detecting the wireless cellular device, transmitting a short message from  
10 the wireless station to the wireless cellular device via a base station of the cellular network, said short message being in a standard short message format supported by said cellular network.

15. The method of claim 11, further comprising the step of, upon  
15 detecting the wireless cellular device, communicating between the wireless station and said wireless cellular device over a frequency or channel not utilized by the cellular network within the microcellular region.

16. The method of claim 11, further comprising the step of  
20 conveying the user selections for display on a point-of-sale terminal, other than a point-of-sale sales terminal, for fulfillment of the user's request.

17. The method of claim 11, further comprising the step of authenticating the user at least in part by using a mobile equipment identifier associated with the wireless cellular device.

5 18. The method of claim 11, further comprising the step of authenticating the user at least in part by using a password entered by the user via the wireless cellular device.

19. The method of claim 11, wherein said remote processing center  
10 includes a user account from which a user may automatically draw funds for purchasing goods or services offered through the wireless consumer transaction system.

20. The method of claim 19, further comprising the step of adding  
15 additional funds to the user account maintained at the remote processing center through a user-initiated electronic transfer.

21. The method of claim 19, wherein said remote processing center deducts the transaction price from the user's account upon approval of the  
20 point-of-sale transaction.

22. The method of claim 11, wherein said menu of user options include a list of items selectable for purchase.

23. The method of claim 22, wherein said items selectable for purchase include a plurality of food items, said food items being physically available at an establishment associated with said point-of-sale terminal.

5           24. A wireless consumer transaction system, comprising:  
a wireless station located within a region of coverage of a cellular network, said wireless station configured to detect the presence of a wireless handheld device within a microcellular region and to convey a menu of user options to the wireless handheld device;

10           a local computer configured to receive, via the wireless station, user selections entered using the wireless handheld device, and to determine a point-of-sale transaction price based upon said user selections;

a remote interface for communicating with a remote processing center to obtain approval for a point-of-sale transaction; and

15           a point-of-sale terminal coupled to said computer, said point-of-sale terminal displaying an indication of whether the point-of-sale transaction was approved by the remote processing center.

25. The wireless communication system of claim 24, wherein said  
20 wireless station is configured to communicate according to a plurality of different cellular protocols.

26. The wireless communication system of claim 24, wherein detection of said wireless cellular device by said wireless station triggers said wireless station to initiate an exchange of point-of-sale information with said wireless cellular device.

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27. The wireless communication system of claim 24, wherein said remote processing center automatically accesses a remote user account associated with the wireless cellular device in response to receiving the request for approval of a point-of-sale transaction.

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28. The wireless communication system of claim 27, wherein said remote processing center automatically deducts an amount of funds from said remote user account sufficient to cover the transaction price of the point-of-sale transaction.

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29. The wireless communication system of claim 28, wherein said remote processing center authenticates the user or wireless cellular device before approving the point-of-sale transaction.

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30. The wireless communication system of claim 29, wherein said remote processing center uses a mobile equipment identifier associated with the wireless cellular device in connection with authentication.



31. The wireless communication system of claim 29, wherein said remote processing center uses a password entered by the user via said wireless cellular device in connection with authentication.

5           32. The wireless communication system of claim 24, wherein said wireless handheld device comprises a cellular telephone.

33. A method for facilitating consumer transactions at a point-of-sale system, the method comprising the steps of:

10           detecting, at a wireless station associated with the point-of-sale system, the presence of the wireless handheld device;

              establishing communication between the wireless station and the wireless handheld device;

              transmitting a menu of options for presentation on a display portion  
15 of the wireless handheld device;

              receiving from the wireless handheld device, via the wireless station, one or more user selections;

              determining a transaction price based upon the user selections;

              triggering an automated transaction with a remote processing center,  
20 whereby funds in a user account associated with the remote processing center are utilized to purchase the user selections;

              receiving, at the point-of-sale system, a point-of-sale transaction approval from the remote processing center;

displaying an indication of the point-of-sale transaction approval at a point-of-sale terminal; and

storing a record of the point-of-sale transaction for later access.

5           34.    The method of claim 33, wherein said user account is accessible through any of a plurality of point-of-sale systems, said user account being available for funding purchases at any of the point-of-sale systems.

10           35.    The method of claim 33, wherein said wireless station obtains a user password and/or mobile equipment identifier associated with the wireless handheld device, for authentication by the remote processing center.

15           36.    The method of claim 33, wherein the user options comprise a list of food items available for purchase at the point-of-sale terminal.

            37.    The method of claim 33, wherein said step of detecting the presence of the wireless handheld device comprises detecting, at said  
20 wireless station, activity of the wireless handheld device in communicating with a general purpose cellular network.